FUTORES II

EGRU Contribution 69

EGRU

Abstract Volume

FUTORES II Conference

Future Understanding of Tectonics, Ores, Resources, Environment and Sustainability

Townsville, Australia

4 -7 June 2017

Edited by:

Jan Marten Huizenga, Zhaoshan Chang, Carl Spandler, Kaylene Camuti, Maree Corkeron, Eric Roberts, Arianne Ford, Christa Placek, Alexander Parker

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Economic Geology Research Centre (EGRU)
James Cook University
Townsville, Queensland

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(Future Understanding of Tectonics, Ores, Resources, Environment and Sustainability)

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Introduction to the FUTORES II 2017 Abstract Volume

With the increasing world population and living standards the demand for mineral and energy resources continues to grow. Future exploration will need to target resources at increasing depths and in areas with cover, and will require an improved understanding of mineral and energy systems and advances in exploration methods and approaches. The Economic Geology Research Centre (EGRU) at James Cook University has organized the FUTORES II conference to summarise recent developments in the exploration and understanding of major types of mineral deposits, to examine the key issues and techniques critical to future minerals and energy exploration, and to discuss the way forward. The conference is being held in tropical Townsville, Queensland, Australia, on 4-7 June 2017. It is following on from the inaugural and highly successful FUTORES conference held in Townsville in 2013.

FUTORES II will bring together researchers, explorers and government agencies to address issues related to the sustainable supply and utilisation of mineral and energy resources. The conference has three symposia: the *David Groves Symposium - New Insights in Mineral Deposit Understanding*, the *New Technologies and Approaches in Mineral Exploration Symposium*, and the *Tectonics, Basins and Resources Symposium.*

The conference is convened by EGRU, an organisation that was established in 1982 to strengthen the links between research and exploration, to promote exploration-oriented research, and to facilitate knowledge transfer. EGRU has a track record of organising successful major conferences to facilitate the exchange of knowledge and ideas and to stimulate new ideas for cutting-edge research and exploration. The Hydrothermal Odyssey conference in 2001, and the STOMP (Structure, Tectonics and Ore Mineralization Processes) conference in 2005, both attracted over 200 participants. In 2009 EGRU collaborated with the SGA to host the tenth biennial SGA conference in Townsville - Smart Science for Exploration and Mining - which attracted over 480 delegates from around the world. In 2013 the first FUTORES conference attracted around 250 participants from 15 countries. FUTORES II is looking to be equally successful and has so far attracted around 265 registrants.

This conference abstract volume contains 134 abstracts covering a wide range of topics related to mineral and energy resources, tectonics and metallogenesis. The abstracts have been reviewed and edited by the Editorial Committee and, in this volume, are organised in alphabetical order of the first author. We thank the delegates for their abstracts and the reviewers for ensuring the quality of the abstract volume.

EGRU would like to acknowledge the support of the College of Science and Engineering, Division of Tropical Science and Environment, at James Cook University. We are also grateful for the support of our conference sponsors: Mount Isa Mines (a Glencore company), South32, Newmont, HiSeis, and Geoscience Australia. The generous assistance of our industry and professional association supporters is also gratefully acknowledged: SEG, SGA, Aranz Geo, AusIMM, Evolution Mining, Carpentaria Gold / Resolute Mining, Minjar Gold, Consolidated Tin Mines, Auctus Minerals, Lantana Exploration and Wolfram Camp Mining.

Zhaoshan Chang
Chair, FUTORES II Conference Committee
22 May 2017

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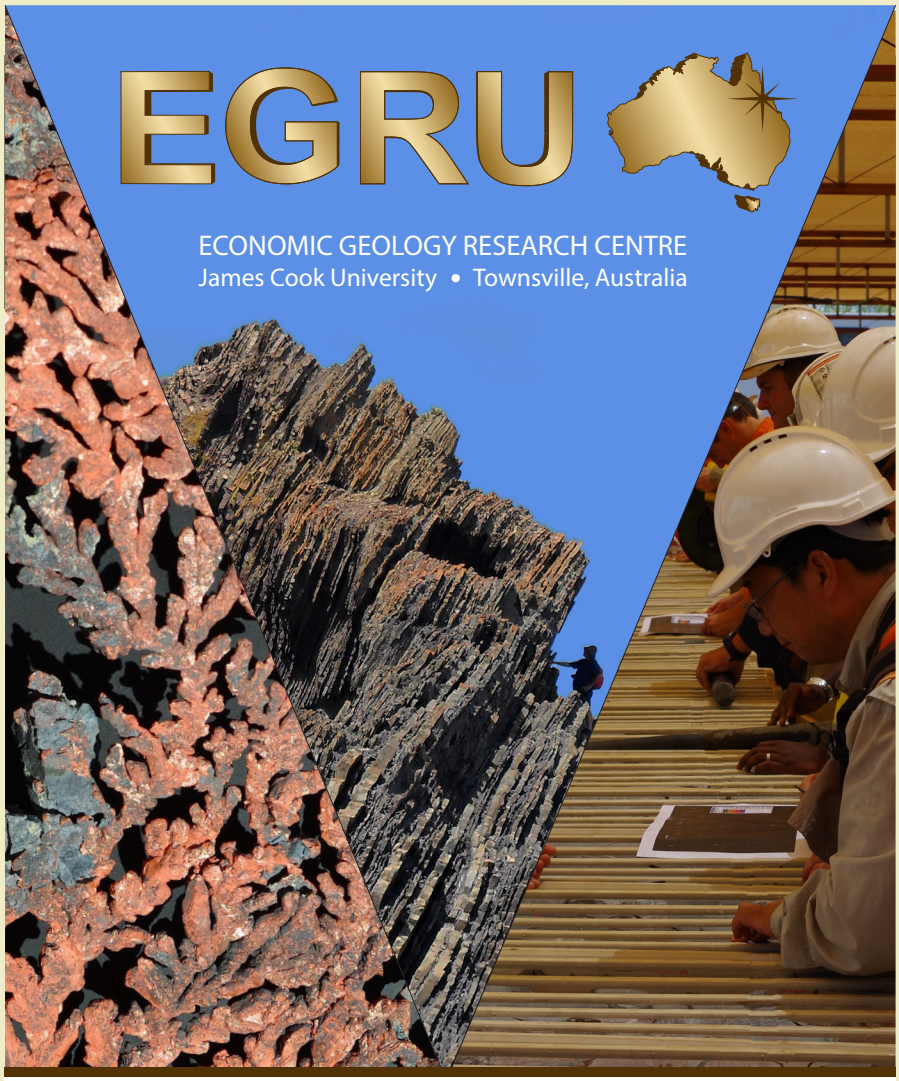

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